



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,012	04/26/2007	Virgil Allen Watson	P06721US1-WATSON	4193
34082                      7590                      10/14/2009 ZARLEY LAW FIRM P.L.C. CAPITAL SQUARE 400 LOCUST, SUITE 200 DES MOINES, IA 50309-2350				
EXAMINER				
DYE, ROBERT C				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
10/14/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/589,012

**Applicant(s)**

WATSON ET AL.

**Examiner**

ROBERT DYE

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4,6-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,6-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/07/2009.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This is a Final Office Action in response to Applicant's reply, dated 7/06/2009, to a Non-Final Office Action. Claims 2, 4, 6-13, and 15-19 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757).

5. Abrams et al. (hereinafter Abrams) teaches a sign with a sheet or film 204 containing a graphics side that is integrally molded onto a planar substrate material 16 (see figure 17) and contains holes 220 on the rear side for mounting (col 19, lines 12-13, figure 20).

6. Regarding the flexible thermoplastic substrate, Abrams teaches that the label can be formed of a plastic sheet such as Teslin (col 20, lines 50), which is known to be a flexible thermoplastic material (the material is commonly used for laminating plastic identification cards or in passports). Although the claims cite the use of an injection molding method rather than a compression molding method as taught by Abrams to form the planar substrate which is fused to the label, the Examiner wishes to point out to applicant that claims 2-8 are directed towards a product and as such will be examined under such conditions. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (See MPEP 2113). Abrams discloses that molten thermoplastic material is integrally molded to a label under pressure by a compression device as opposed to an injection device. Although injection molding device is not used, the final structure of the product is substantially the same (label fused to substrate).
7. Regarding the second object being a second sign, Abrams teaches mounting features but does not disclose that the mounting feature is adapted to attach to a second sign. Abrams teaches that the sign is capable of various uses including a point-of-sale sign (Fig. 21). Since it is well-known in the marketing industry to use two-sided point of use promotion signs to attract customers from two directions, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to connect the promotional sign of Abrams to another molded identical promotional sign in order to attract customers from two directions.

8. Regarding claim 4, Abrams teaches that the sign contains a plurality of ribs 202 which facilitates strengthening the sign (col 18, lines 44-47).

9. Claims 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) as applied to claim 2 above, and further in view of Eberle et al. (USP 6,131,320) or Weiner et al. (USP 4,541,190).

10. Regarding claim 6, wherein the mounting feature is a male snap element adapted to mate with a corresponding female snap element, Abrams does not teach a male snap element. However, male and female snap elements are well known in the molding art as an effective means for connection. For example, Eberle et al. (abstract) and Weiner et al. (col 4, lines 20-25) disclose male and female snap element for securing sign portions together. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a male snap element in the sign of Abrams in order to efficiently and effectively connect the signs.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) as applied to claim 2 above, and further in view of in view of Bowers et al. (PG Pub 2003/0154639).

12. Regarding claim 7, Abrams teaches a sign with a label integrally molded onto planar substrate and a mounting feature for securing the sign. Abrams does not teach a sign with an end extending between the front and back side that includes mounting features for securing the sign to a second sign. In the same field of endeavor of sign manufacture, Bowers et al. teach a sign having a front with a label and a back side. In one embodiment, Bowers et al. teach a sign with an extending end having mounting features for connection to a second sign (see figure 7, wherein mounting brackets 46a, 46b connect two display signs, and paragraph 33). The configuration of this embodiment would place the labels on each sign directly next to each other such that they are contiguous. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to connect the signs end to end as taught by Bowers et al. in the method of Abrams for the purpose of increasing the customizability of the sign and allow for more diverse messages to be displayed to attract or inform persons.

13. Claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrams et al. (USP 5,800,757) in view of Bowers et al. (PG Pub 2003/0154639) as applied to claim 7 above, and further in view of Wardle (USP 4,137,657)

14. Regarding claim 8, Abrams in view of Bowers discloses a second sign attached next to a first sign for the purpose of increasing the customizability of the sign (see above). In regards to a groove, such is well-known in the molding art as an effective means for connection. For example, Wardle discloses a display wherein grooves are

located at the edges to permit mating between the plural displays (Fig. 1). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a groove as taught by Wardle in the sign of the hypothetical combination of Abrams and Bowers in order to efficiently and effectively connect the signs. An advantage of the groove would be the provision of a flat surface to permit the effective use of adhesives (col 4, lines 7-9).

15. Claim 9, 10, 11, 12, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757).

16. Alberts discloses a method for injection molding a product containing a label wherein said method comprises the steps of providing a first and second mold portion located opposite from one another (mold portions 6 and 8); associating an injection device with the first mold portion (supply duct 16 is associated with injection molding machine shown schematically as pump 18, Fig 4, 5); associating an ejector system with first sign mold portion (Alberts teaches that the transfer part 38 is provided to remove the formed product 48 from the first mold cavity 14 but that optionally, an ejection means can be provided in the mold cavity 14 with the advantage of removing the product in a simpler manner without the product sustaining damage, pg 7, lines 21-25; Alberts teaches that conventional ejection pins can be employed in cavity 14, pg 12, lines 7-11); placing a label 60 on the second mold portion 8 (see fig. 5, pg 8, lines 1-6); closing the first and second mold portions together and injecting the first sign mold

portion via the injection device (pg 8, lines 7-16), and removing the previously formed sign prior to mold closing (pg 8, lines 7-8).

17. With regards to the ejector system contacting the formed sign on the side opposite the label, such would be inherent in the method of Albert which locates the ejector system and formed material in mold cavity 14, which is opposite side 62 onto which the label is placed (see Fig 5).

18. Alberts does not teach the method for use in the manufacture of signs. In the same field of endeavor of molding thermoplastic articles with sheet-like inserts, Abrams et al. (hereinafter Abrams) teaches that a sign (point-of-purchase sign, col 20, lines 33-34) may be produced via the use of a printed label as the insert in a molding operation (see figure 17 and 21). It would have been obvious to a person having ordinary skill in the art to produce a sign as taught by Abrams with the method of Alberts in order to form a diverse article capable of attracting customers and relaying information.

19. Regarding claims 10 and 11, Alberts teaches that the automated transfer device moves between first and second mold portions to simultaneously place a label and remove a formed product (pg 2, lines 17-26; pg 7, line 6- pg 8, line 16; Fig 5).

20. Regarding claim 12, Alberts teaches that the material is injected through channel 16 into the first mold cavity (pg 5, lines 5-10, 18-23; Fig. 5).

21. Regarding claim 15, Alberts discloses an automated transfer device which places labels and removes formed products. Alberts teaches that said transfer device includes guiding means which are adapted to mate with guidance members on the molding portion (see rails or slots 22 shown in Fig. 5 and 7). Although the guidance members



are shown as being associated with the first mold portion (which Alberts describes as the stationary part of the mold), Alberts teaches that the guidance members can also be included in the movable part (pg 12, lines 5-7). Alberts also discloses a mold design wherein the guidance system is on the second mold portion (see Fig 10, first portion denoted by injection system 16 and 18).

22. Regarding claim 19, Alberts discloses that multiple labels can be placed within the second mold portion via multiple transfer devices (see Fig 8, 9; pg 9, lines 22-pg 10, 20).

23. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) as applied to claim 12 above, and further in view of Assalita et al. (USP 5,922,367, of record).

24. The hypothetical combination of Alberts and Abrams does not teach a method wherein a heated sprue bushing is used to eliminate the need to manually trim the sign. In the same field of endeavor of injection molding, Assalita et al. (hereinafter Assalita) teach the use of a heated sprue bushing in an injection mold for the purpose of reducing material waste by preventing material from solidifying within the sprue busing (col 1, lines 44-47; col 4, lines 67-68). Assalita further teaches that the sprue material, if allowed to solidify, has to be removed from the part and discarded (col 1, lines 32-35). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a heated sprue bushing as taught by Assalita in the method of Alberts and Abrams for the purpose of reducing material waste and eliminating the

need to remove excess sprue material from the formed part (col 1, lines 44-47; col 4, lines 67-68).

25. Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) as applied to claim 15 above, and further in view of Hasl et al. (USP 4,880,368).

26. The hypothetical combination of Alberts and Abrams does not teach a method wherein the label hopper contains a guidance member adapted to mate with the automated device responsible for transferring labels to the mold. In the same field of endeavor of in-mold labeling, Hasl et al. teaches a label hopper with fingers 92 and 92a which adapt to mate with the cutouts 86 in the heads of 75 (label transfer device) (see figure 4, col 9, lines 46-50) for the purpose of aligning the label transfer device with the labels. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have used guidance members on the label hopper as taught by Hasl et al. in the method of Alberts and Abrams for the purpose of aligning the automated label transfer device.

27. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alberts (WO03/016017) in view of Abrams et al. (USP 5,800,757) and Hasl et al. (USP 4,880,368) as applied to claim 16 above, and further in view of Hellmer et al. (USP 4,397,625).

28. Regarding claim 17, the hypothetical combination of Alberts, Abrams and Hasl et al. teach a method for manufacturing a sign via in-mold labeling as described above in claim 16, but does not teach a method wherein the orientation of the label is adjusted on the label hopper. In the same field of endeavor of methods for manufacturing products via injection molding with in-mold inserts, Hellmer et al. (hereinafter Hellmer) teach a method wherein a label hopper is provided with mechanisms designed to hold a label in a particular orientation (see figure 3). Hellmer teach that a "labels L are maintained at a preset orientation by a plurality of elongated guide rods 64 which are arranged in accordance with the configuration of the particular label" (col 3, lines 35-43). Thus it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have used orientation adjustment mechanisms as taught by Hellmer in the method of the aforementioned combination for the benefit of holding the labels in a preset orientation for pick up and accurate placement by the label transfer means.

29. Regarding claim 18, wherein the adjustment mechanism is used that can adjust in a lateral direction, a vertical direction and rotational direction, Hellmer et al. does not explicitly describe the directions with which the guidance rods can be arranged. However, Hellmer does state that the guidance rods are positioned in accordance with the configuration of the particular label (col 3, lines 35-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the guidance rods of Hellmer as necessary in a lateral, vertical or rotational direction in the

hypothetical combination of Alberts, Abrams and Hasl for the benefit of ensuring an accurate placement of the insert in the molding device.

***Response to Arguments***

30. Applicant's arguments filed 7/06/2009 have been fully considered but they are not persuasive.

31. The Applicant's Arguments are summarized as follows:

a. Regarding claim 2, the Applicant argues that Abrams teaches a basketball sign which is not intended to be attached to a second sign and Abrams does not teach point of use promotion signs. Applicant argues that there would be no motivation to employ a second sign attachment.

b. Regarding claim 9, the Applicant argues that Alberts does not teach an ejector system which contacts the formed sign from a side opposite from the side with the label.

32. In regards to the double-sided sign arguments, Abrams expressly teaches a point of sale sign, "Fig. 21 is a view of a point-of-purchase display manufactured in accordance with an aspect of this invention" (Fig. 21, col 6, lines 33-34; col 20, line 33-55). Thus, Abram does disclose forming signs for marketing purposes and it is well known in the art to connect multiple signs for the purposes of displaying additional information (this is evidenced by Eberle et al. USP6,131,320 and Bowers et al. PGPub 2003/0154639, both of record). It would have been obvious to a person having ordinary skill in the art at the time of the invention to connect the promotional sign of Abrams to

the back of a second promotional sign for the purpose of attracting customers from multiple directions.

33. In regards to the ejection system arguments, while Alberts discusses a vacuum system transfer device which contacts the label side of the formed object, Alberts states that "Optionally, ejection means (not shown) can be provided in the mold cavity 14" and that "With such ejection means, the advantage is achieved that the product 48 can be taken out in a simpler manner without product 48 sustaining damage" (pg 7, lines 21-25). Alberts further teaches on pg 14, "different ejection means can be provided for removing product from the mold cavities 14, for instance conventional ejection pins, the product then falling from the mold 2 under the influence of gravity" (pg 12, lines 9-12). Cavity 14 is located opposite the side upon which the label 60 is placed (illustrated in Fig. 5) and the use of conventional ejection pins within cavity 14 would result in said pins contacting the molded product on the side opposite the label. Thus, Alberts teaches an ejection system which contacts the formed product on a side opposite of the label side.

### ***Conclusion***

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT DYE whose telephone number is (571)270-7059. The examiner can normally be reached on Monday to Friday 8:00AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RCD/

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 1791